

which the excited and/or ionized particles are formed by the electromagnetic wave, characterized in that an inlet (17) is available for inlet of the process gas into an interior chamber (31) of the coaxial conductor (30) between an outer conductor (18) and an inner conductor (19), and that the inner chamber forms the plasma zone (20).

B2
5. (Twice Amended) Device according to claim 1, characterized in that the inner conductor (19) and/or the outer conductor (18) of the coaxial conductor (30) are cooled by means of cooling.

Please enter the following newly submitted claim.

B3
16. Device according to claim 1, characterized in that the inner conductor (19) and/or the outer conductor (18) of the coaxial conductor (30) are cooled by water cooling.